

AMENDED IN SENATE MAY 27, 2014

AMENDED IN SENATE MAY 5, 2014

AMENDED IN SENATE APRIL 3, 2014

**SENATE BILL**

**No. 1259**

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**Introduced by Senator Pavley  
(Principal coauthor: Senator Cannella)  
(Coauthor: Senator Wolk)**

February 21, 2014

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An act to amend Sections 6120 and 10004.6 of the Water Code, relating to water.

LEGISLATIVE COUNSEL'S DIGEST

SB 1259, as amended, Pavley. Dams: sedimentation studies.

Existing law requires the Department of Water Resources to make or cause to be made investigations and gather or cause to be gathered data as needed for a proper review and study of the various features of the design and construction of dams, reservoirs, and appurtenances.

This bill would require the department, in collaboration with specified entities, to make or cause to be made investigations and to gather or cause to be gathered data for a proper review and study of the loss of storage capacity behind dams resulting from sedimentation *and would authorize the department to limit the study to certain reservoirs*. The bill would require results of the ~~sedimentation~~ study to be reflected in the quinquennial update of ~~the~~ *The California Water Plan* and be provided to the appropriate policy committees of the Senate and the Assembly. The bill would require ~~that an initial study be completed by January 1, 2017, and that a sedimentation study include an evaluation of the department to identify high-priority reservoirs for additional~~

evaluation, for which the department would be required to evaluate and characterize the sediment for mercury and sediment size and to identify and evaluate cost-effective strategies for sediment removal, relative to the costs of alternative methods of flood protection and water supply.

Existing law requires the Department of Water Resources to update ~~the~~ The California Water Plan, which is a plan for the conservation, development, and use of the water resources of the state, every 5 years. Existing law requires the department, as part of the update, to conduct a study to determine the amount of water needed to meet the state's future needs. The department is required, one year prior to issuing each update to the California Water Plan, to release a draft of assumptions and estimates upon which the study will be based. Existing law prescribes a list of subjects for which the department is required to release those assumptions and estimates.

This bill would add estimated loss of storage capacity behind dams resulting from sedimentation to that list.

Vote: majority. Appropriation: no. Fiscal committee: yes.  
State-mandated local program: no.

*The people of the State of California do enact as follows:*

1 SECTION 1. Section 6120 of the Water Code is amended to  
2 read:  
3 6120. (a) For the purpose of enabling it to make decisions as  
4 compatible with economy and public safety as possible, the  
5 department shall make or cause to be made investigations and shall  
6 gather or cause to be gathered data as may be needed for a proper  
7 review and study of the various features of the design and  
8 construction of dams, reservoirs, and appurtenances.  
9 (b) (1) The department shall further make or cause to be made  
10 investigations and shall gather or cause to be gathered data as may  
11 be needed for a proper review and study of the loss of storage  
12 capacity behind dams resulting from sedimentation. *The department*  
13 *may limit the sedimentation study to those reservoirs the*  
14 *department anticipates will have either a high volume of*  
15 *sedimentation or a high sedimentation rate.* The results of the  
16 sedimentation study shall be reflected in the quinquennial update  
17 of ~~the~~ The California Water Plan developed pursuant to Chapter  
18 1 (commencing with Section 10004) of Part 1.5 of Division 6 and

1 shall be provided to the appropriate policy committees of the Senate  
2 and Assembly.

3 (2) An initial sedimentation study ~~shall~~ *may* be completed by  
4 January 1, 2017.

5 (3) A sedimentation study may be based upon all of the  
6 following:

7 (A) A compilation of published and unpublished sedimentation  
8 data from dam operators and other sources.

9 (B) Original reservoir surveys at reservoirs lacking  
10 sedimentation ~~data~~. *data, where the department deems appropriate.*

11 ~~(C) An evaluation and characterization of sediment for mercury~~  
12 ~~and sediment grain size.~~

13 ~~(D)~~

14 (C) Modeling, including techniques such as geographic  
15 information system-based reservoir sedimentation modeling.

16 ~~(4) A sedimentation study shall include an evaluation of~~  
17 ~~cost-effective strategies for sediment removal, relative to the costs~~  
18 ~~of alternative methods of flood protection and water supply,~~  
19 ~~including the costs of constructing new dams and reservoirs.~~

20 *(4) The department shall identify high-priority reservoirs for*  
21 *additional evaluation within the study, for which the department*  
22 *shall do both of the following:*

23 *(A) Evaluate and characterize the sediment for mercury and*  
24 *sediment size.*

25 *(B) Identity and evaluate cost-effective strategies for sediment*  
26 *removal, relative to the costs of alternative methods of flood*  
27 *protection and water supply, including the costs of constructing*  
28 *new dams and reservoirs.*

29 (5) In designing and conducting a sedimentation study, the  
30 department shall collaborate with the United States Bureau of  
31 Reclamation, the United States Army Corps of Engineers, the  
32 United States Geological Survey, and the Delta Independent  
33 Science Board.

34 SEC. 2. Section 10004.6 of the Water Code is amended to read:

35 10004.6. (a) As part of updating The California Water Plan  
36 every five years pursuant to subdivision (b) of Section 10004, the  
37 department shall conduct a study to determine the amount of water  
38 needed to meet the state's future needs and to recommend  
39 programs, policies, and facilities to meet those needs.

1 (b) The department shall consult with the advisory committee  
2 established pursuant to subdivision (b) of Section 10004 in carrying  
3 out this section.

4 (c) One year before issuing each update to The California Water  
5 Plan, the department shall release a preliminary draft of the  
6 assumptions and other estimates upon which the study will be  
7 based, to interested persons and entities throughout the state for  
8 their review and comments. The department shall provide these  
9 persons and entities an opportunity to present written or oral  
10 comments on the preliminary draft. The department shall consider  
11 these documents when adopting the final assumptions and estimates  
12 for the study. For the purpose of carrying out this subdivision, the  
13 department shall release, at a minimum, assumptions and other  
14 estimates relating to all of the following:

15 (1) Basin hydrology, including annual rainfall, estimated  
16 unimpaired streamflow, depletions, and consumptive uses.

17 (2) Groundwater supplies, including estimates of sustainable  
18 yield, supplies necessary to recover overdraft basins, and supplies  
19 lost due to pollution and other groundwater contaminants.

20 (3) Current and projected land use patterns, including the mix  
21 of residential, commercial, industrial, agricultural, and undeveloped  
22 lands.

23 (4) Environmental water needs, including regulatory instream  
24 flow requirements, nonregulated instream uses, and water needs  
25 by wetlands, preserves, refuges, and other managed and unmanaged  
26 natural resource lands.

27 (5) Current and projected population.

28 (6) Current and projected water use for all of the following:

29 (A) Interior uses in a single-family dwelling.

30 (B) Exterior uses in a single-family dwelling.

31 (C) All uses in a multifamily dwelling.

32 (D) Commercial uses.

33 (E) Industrial uses.

34 (F) Parks and open spaces.

35 (G) Agricultural water diversion and use.

36 (7) Evapotranspiration rates for major crop types, including  
37 estimates of evaporative losses by irrigation practice and the extent  
38 to which evaporation reduces transpiration.

39 (8) Current and projected adoption of urban and agricultural  
40 conservation practices.

1 (9) Current and projected supplies of water provided by water  
2 recycling and reuse.

3 (10) Estimated loss of storage capacity behind dams resulting  
4 from sedimentation, as found by the study conducted pursuant to  
5 subdivision (b) of Section 6120.

6 (d) The department shall include a discussion of the potential  
7 for alternative water pricing policies to change current and  
8 projected water uses identified pursuant to paragraph (6) of  
9 subdivision (c).

10 (e) This section does not require the department to update, or  
11 prohibit the department from updating, any data necessary to update  
12 The California Water Plan pursuant to subdivision (b) of Section  
13 10004.